

FIG. 1

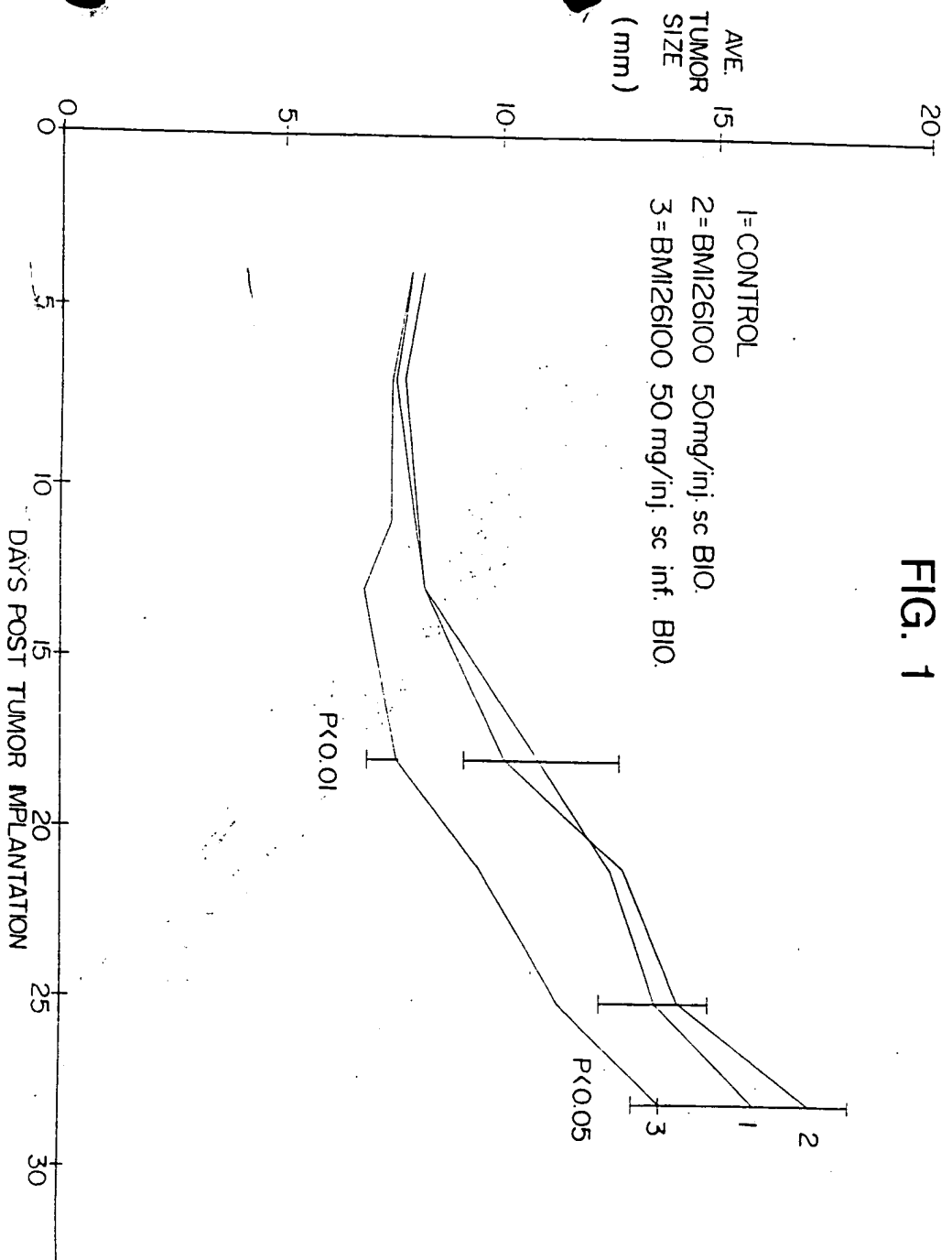


FIG. 2

Litorin

A1 A2 A3 A4 A5 A6 A7 A8 A9
pGlu-Gln-Trp-Ala-Val-Gly-His-Phe-Met

SEQ ID NO. 12

W

(Ser¹) Neuromedin C

A0 A1 A2 A3 A4 A5 A6 A7 A8 A9
Gly-Ser-His-Trp-Ala-Val-Gly-His-Leu-Met

W

Bombesin (last 10 amino acids)

A0 A1 A2 A3 A4 A5 A6 A7 A8 A9
Gly-Asn-Gln-Trp-Ala-Val-Gly-His-Leu-Met

W

human GRP (last 10 amino acids)

A0 A1 A2 A3 A4 A5 A6 A7 A8 A9
Gly-Asn-His-Trp-Ala-Val-Gly-His-Leu-Met

W

FIG. 3a

VIP FAMILY OF PEPTIDES

hpb VIP	His-Ser-Asp-Ala-Val-Phe-Thr-Arg-Leu-Arg-Lys-Gln-Met-Ala-Val-Lys-Lys-Tyr-Leu-Asn-Ser-Ile-Leu-Asn-NH ₂
p PHI	His-Ala-Asp-Gly-Val-Phe-Thr-Ser-Arg-Leu-Leu-Gly-Gln-Leu-Ser-Ala-Lys-Lys-Tyr-Leu-Glu-Ser-Leu-Ile-NH ₂
pb Secretin	His-Ser-Asp-Gly-Thr-Phe-Thr-Ser-Arg-Leu-Ser-Arg-Asp-Ser-Ala-Arg-Leu-Gln-Arg-Leu-Gly-Leu-Val-NH ₂
h GRF	Tyr-Ala-Asp-Val-Ile-Phe-Thr-Arg-Lys-Val-Leu-Gly-Gln-Leu-Ser-Ala-Arg-Lys-Leu-Leu-Gln-Asp-Ile-Met-Ser-
ph glucagon	His-Ser-Gln-Gly-Thr-Phe-Thr-Ser-Arg-Lys-Tyr-Leu-Asp-Ser-Arg-Arg-Ala-Gln-Asp-Phe-Val-Gln-Trp-Leu-Met-Asn-Thr
p GIP	Tyr-Ala-Glu-Gly-Thr-Phe-Ile-Ser-Arg-Lys-Ile-Ala-Met-Asp-Lys-Ile-Arg-Gln-Gln-Asp-Phe-Val-Asn-Trp-Leu-Leu----
o CRF	Ser-Glu-Glu-Pro-Pro-Ile-Ser-Leu-Asp-Leu-Ile-Phe-His-Leu-Leu-Arg-Glu-Val-Leu-Glu-Met-Thr-Lys-Ala-Asp-Gln-Leu-----Ala-
s	agline (amphibian) Glu-Gly-Pro-Pro-Ile-Ser-Ile-Asp-Leu-Ser-Leu-Glu-Leu-Arg-Lys-Met-Ile-Glu-Ile-Glu-Lys-Gln-Lys-Glu-----Lys-
Helodermin	His-Ser-Asp-Ala-Ile-Phe-Thr-Gln-----Gln-Tyr-Ser-Lys-Leu-Leu-Ala-Lys-Leu-Ala-Lys-Leu-Ala-Leu-Gln-Lys-Lys-Leu-Ala-Ser-
Urotensin I	Asn-Asp-Asp-Pro-Pro-Ile-Ser-Leu-Asp-Leu-Thr-Phe-His-Leu-Leu-Arg-Asn-Met-Ile-Glu-Met-Ala-Arg-Ile-Glu-Asn-Glu-----Arg-

W/W

giving

FIG. 3b

SEQUENCES CONTINUED:

h GRF	Arg-Gln-Gln-Gly-Glu-Ser-Asn-Gln-Glu-Arg-Gly-Ala-Arg-Ala-Arg-Leu-NH ₂
pGIP	Ala-Gln-Lys-Gly-Lys-Ser-Asp-Trp-Lys-His-Asn-Ile-Thr-Gln
o CRF	Gln-Gln-Ala-His-Ser-Asn-Arg-Lys-Leu-Leu-Asp-Ile-Ala-NH ₂
Sauvagine	Gln-Gln-Ala-Asn-Asn-Arg-Leu-Leu-Asp-Thr-Ile-NH ₂
Helodermin	Ile-Leu-Gly-Ser-Arg-Thr-Ser-Pro-Pro-NH ₂
Urotensin I	Glu-Gln-Ala-Gly-Leu-Asn-Arg-Lys-Tyr-Leu-Asp-Glu-Val-NH ₂

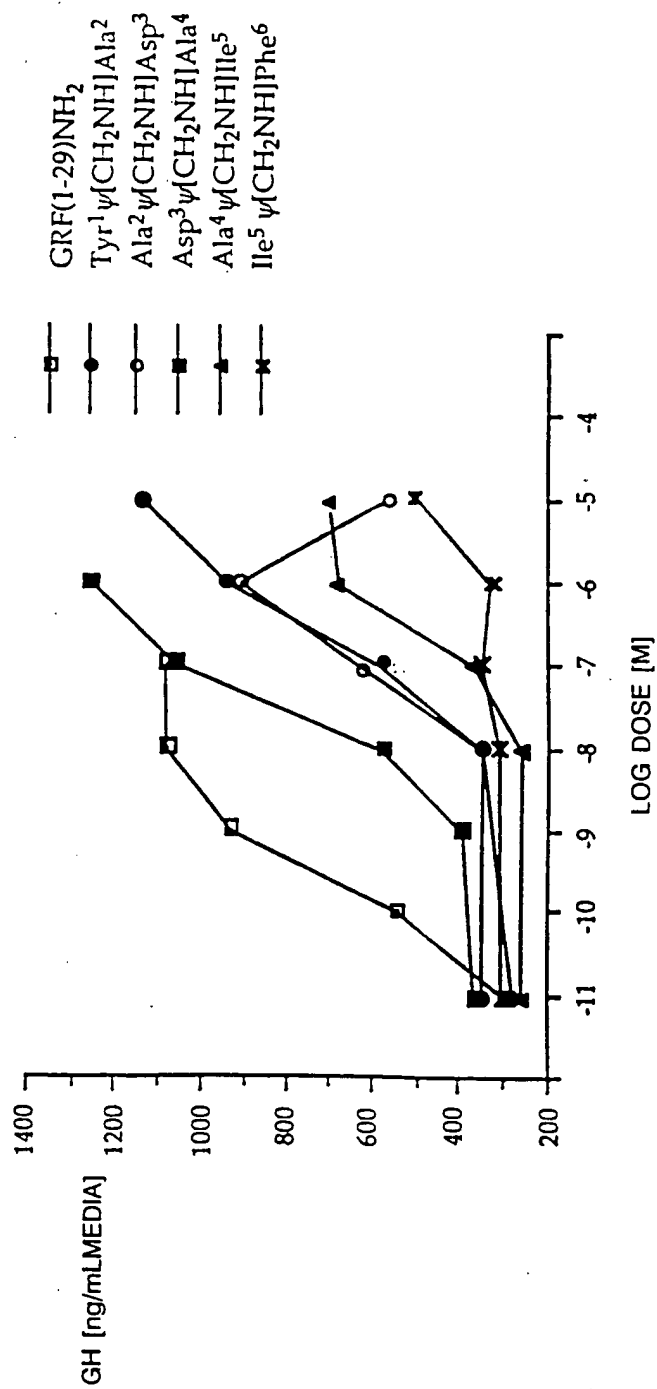


FIG. 4

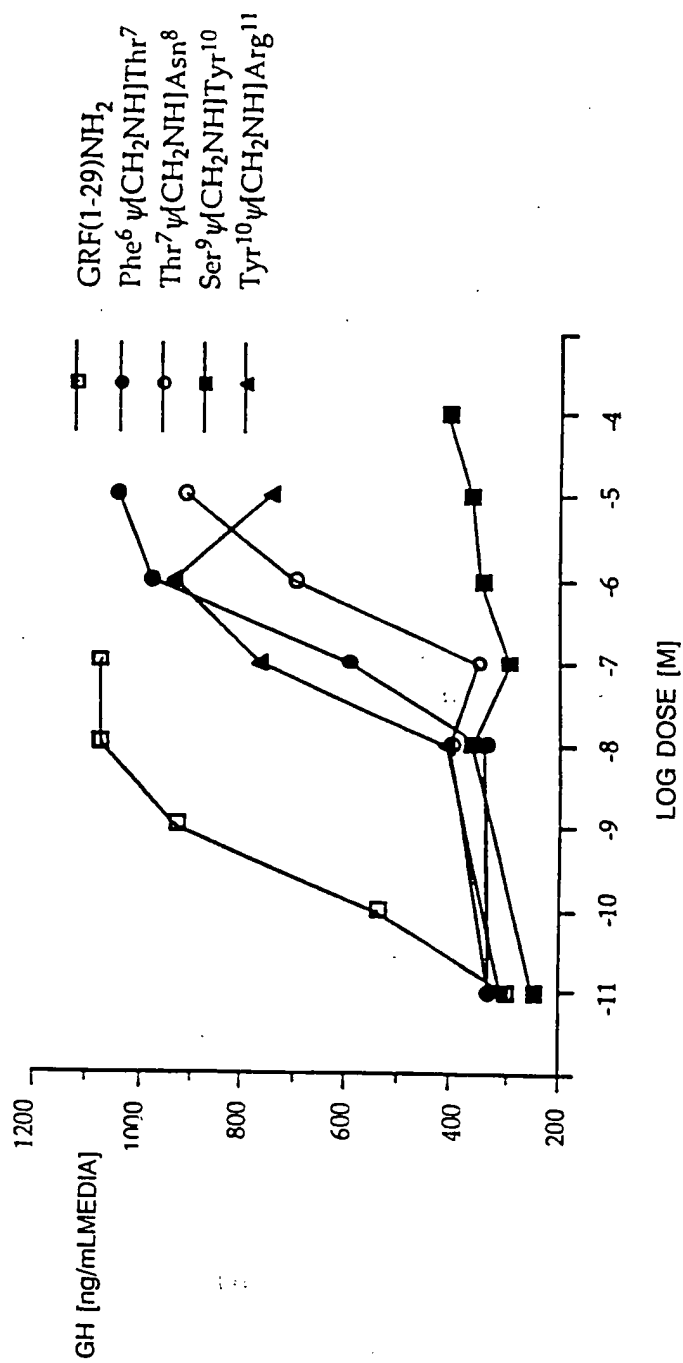


FIG. 5

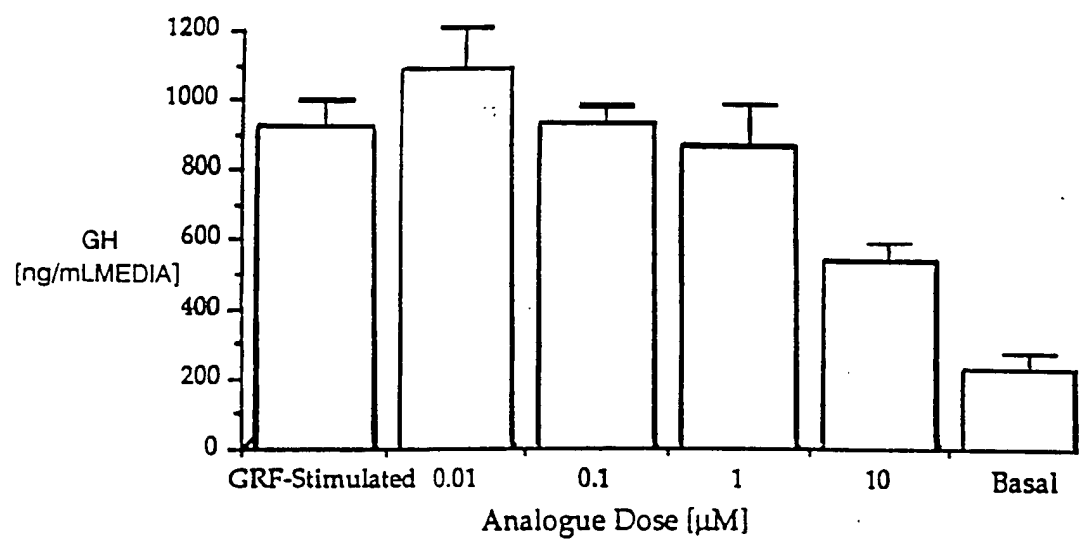


FIG. 6